JAN 2 2 1934

The Maryland Fruit Grower

January, 1934

Maryland State
Horticultural Society

OPPORTUNITY

Buy and Plant This Fall Before Prices Advance

Don't be one of those who will say, "I WISH I HAD BOUGHT MY TREES."

ACT NOW

We have one of the largest and most complete assortments of high grade fruit trees and ornamentals available today.

WE SPECIALIZE IN

PEACH AND APPLE TREES

Our peach trees are extra fine this year. Just the kind of trees that grow and make an orchard you can be proud of. All leading commercial varieties, including:

GOLDEN JUBILEE

—AND—

SHIPPERS LATE RED

The quality of our apple trees is well known. We have the same dependable trees to offer this year. You should know more of our new varieties:
RICHARED DELICIOUS BLAXTAYMAN GALLIA BEAUTY
RED ROME LOBO McINTOSH

They Mean Added Profits for the Fruit Growers

A complete list of all leading commercial varieties of apples, both one and two-year trees.

Thousands of Extra Fine 2-Year Old
YORK IMPERIAL TREES

We also specialize in small fruit plants such as Strawberries, Raspberries, Blackberries, and Grapes. We have all leading commercial varieties.

WE SELL DIRECT TO THE PLANTERS AT FAIR PRICES

Send for our complete price list today and buy from no nursery until you receive our prices and know more about the

Bountiful Ridge Nurseries

PRINCESS ANNE, MARYLAND

Maryland ◆ Fruit ◆ Grower

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The Maryland State Horticultural Society

A. F. Vierheller, Editor

Vol. 4 **January, 1934** **No. 1**

THE ANNUAL WINTER MEETING

The Thirty-Sixth Annual Meeting of the Society, held in the Horticultural Building, College Park, was an outstanding success. The large attendance represented the great majority of Maryland's fruit growers, and many prominent growers from the neighboring states The speakers were fine, and each had some real information that was useful and valuable to the fruit industry as well to the individual grower. If we follow any of the suggestions or facts, Maryland growers are going to think better, spray better, plan better and manage their affairs more carefully in the future.

The educational exhibits showing experimental plans and results, and also a display of Maryland fruits, as well as apple varieties from other states, insect control methods, insect injuries, etc., drew much favorable comment.

The commercial exhibits were made possible by the excellent cooperation of the commercial firms handling spraying and washing machines, tillage tools, tractors, packing materials, spray materials fertilizers and nursery stock. The exhibit of five types of fruit washing machinery was perhaps the most complete of its kind ever shown at any horticultural society meeting. There was something to see at all times. Demonstrations of fruit washing were held at certain periods; spray machines were in action and growers were given opportunity to spray with various types of spray guns, rods and nozzles, using as high as 800 pounds pressure.

A new feature of the meeting was the serving of meals in the building. This allowed more time for visiting with the other fellows, and time to see the exhibits more fully. The dining room was unique in its decorations of palms and "Maryland grown" orange tangerine, grapefruit and kumquat trees in full fruit.

If you missed it, we are sorry, for every effort was made by the officers, the Experiment Station, the Horticultural Staff, the Extension Service and the exhibitors, to make your attendance at the meetings, both pleasant and profitable.

A CLASSIFICATION OF PEACH BUDS

New Jersey Circulars 271 and 274, March, 1933, contain some interesting information regarding the bud formation, or "bud set" of various peach varieties. Peach growers know that some peach varieties "bud up" heavier than others. Professor M. A. Blake has made comparisons of various varieties, on the basis of number of buds per 12 inches of growth on new terminal

wood ranging from 10 to 14 inches on well-formed trees 4 to 8 years old. While bud set will vary in localities, season, etc., Professor Blake has grouped varieties into 6 classes. It is impossible to print the entire list of 135 varieties and species listed, but the more important varieties have been selected for information to Maryland growers.

Exceptional Bud Set—40 buds or more per 12 inches—no important variety listed.

Unusual Bud Set—30 to 39 buds per 12 inches—Cumberland, Greensboro.

Extra Good Bud Set—20 to 29 buds per 12 inches—Pioneer, Radiance, Mayflower, Marigold, Hiley, Oriole, Golden Jubilee, Primrose, Eclipse.

Good Bud Set—15 to 19 buds per 12 inches—Early Crawford, Carman, Slappey, Belle, Elberta, Ray, Hale.

Fair Bud Set—10 to 14 buds per 12 inches—Fox, Salberta, Augbert, Rochester, Heath Cling.

Light Bud Set—Less than 10 buds per 12 inches—Brackett, Shipper's Late Red, Early Elberta.

"1934"

This is the beginning of a New Year, and a good time for making new resolutions. No better resolutions could be made than these: (1) to join your State Horticultural Society NOW; (2) make a solemn promise that you will attend the Thirty-Seventh Annual Meeting next January.

This is a time when we need good organization among fruit growers for the benefit of the whole fruit growing industry. We need information, action, and united effort. The Horticultural Societies are organized, now, as a group of 17 states, and the participation of every fruit grower is necessary. So let's make the resolution, then send one dollar to the Secretary for 1934 membership. You'll never regret it; and if you want to do a favor for your neighbor, get him to join, too.

The name and address of the Secretary is A. F. Vierheller, College Park, Maryland. He will be glad to hear from you.

West Virginia Meeting

The West Virginia Horticultural Society will meet at Martinsburg, on February 14 and 15, 1934.

Peach Leaf Curl

Most peach growers know this disease. It was too common in peach orchards last spring. The spores of the disease are resistant to heat and cold, but easily killed off by fungicide sprays. These spores are now wintering over on the bud scales and roughened bark. They are awaiting a warm spell when the buds will begin to swell, and then its too late to spray for the spores will have germinated and entered the tiny leaves, within the buds.

The Maryland Spray Service cards for peach leaf curl have been sent out. The wise grower sprayed in late November and December. If you failed to

MORE GRADE "A" FRUIT

with

KOPPERS FLOTATION SULPHUR

Only the best fruit brings the top price, and the more Grade A fruit, the bigger the profit. That's why thousands of growers use Koppers Flotation Sulphur. They have learned that because of its microscopic ultra-fineness—actually 15 times finer than 300 mesh—it deposits more uniformly, adheres better, gives maximum coverage, and is always certain in results. For better fruit and bigger profits, spray with Koppers Flotation Sulphur.

The Original and Genuine Flotation Sulphur carries the Koppers name and this trade mark. Look for it.

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get it done, better plan to do it as soon as possible.

Lime sulfur (32° Baume) at the rate of 2½ gallons per 100 gallons of water will control leaf curl, or use Bordeaux Mixture, 6-6-100 (which means 6 pounds of copper sulfate and 6 pounds of good lime in 100 gallons of water) if you like. But remember that the tree must be thoroughly covered. If leaf curl is bad next spring, you will see what parts of the tree you missed, and if you sprayed too late, you will find that out, too.

If there is any question about spray mixture for terrapin scale write Dr. E. N. Cory, College Park, Maryland.

What About This?

In a recent address at College Park, Dr. O. E. Baker, of the U. S. Bureau of Agricultural Economics, stated that 70 million acres of farm land had been destroyed by erosion, 100 million acres had lost the top soil and 125 million acres more were rapidly losing the top soil. Maybe we are trying to farm too much land, but why let it wash down the creek, no matter whether we need it or not? Some future generations may have use for it.

Now let's apply erosion facts to the orchard. Recently, the New Jersey Horticultural Society News printed an article by Dr. L. L. Lee, of the New Jersey Experiment Station in which he wrote:—

"Most of us know that the greater part of the fertility of any land is in the surface layers as it is in this part of the soil body that most of the organic matter and active plant food are found. Without the proper amount of organic material much of the water holding capacity of the soil is lost, necessary bacterial and chemical activities are retarded, and the physical condition suffers whether the soil be heavy or light. It has been estimated by qualified authorities that the plant food removed from the cultivated areas and pastures of the United States every year by erosion is at least twenty-one times more than that removed by the crops themselves.

"Without the surface layers with their valuable humus and other plant food the "raw" subsoil becomes exposed on the surface and is always less productive and absorptive and too often of very undesirable physical condition difficult to plow and cultivate and obtain a desirable seed bed. It bakes more easily, dries out more quickly in dry periods, and tends to become water logged in wet seasons. What plant food it contains is inert and unavailable and only a most expensive long-time program of soil improvement with intensive tillage and the liberal use of lime and organic matter can even hope to restore it to some degree of its former fertility and productive power.

"In the orchard sections of the state many trees have been set on sloping ground and clean methods of cultivation leave the bare soil even on slight slopes most susceptible to wind and running water. The tracks of spraying apparatus constantly keep open old, and open up new courses for water run off, so that gullies are a common occurrence between the rows of fruit. These vary in depth from a few inches to three feet, and in places the damage is so widespread that trees twelve to twenty years old find themselves with roots exposed and isolated on "islands" two or three feet above the surrounding ground level.

"A detailed erosion survey of an orchard of apples of a very desirable

A superior FRUIT FERTILIZER

'AERO' *Granular* CYANAMID

BECAUSE—

It feeds trees evenly throughout season
It grows large dark-green leaves
It holds leaves on entire summer
It produces good set of fruit and fruit buds
It improves color of fruit
It increases yield

and Because—

It is the only nitrogen fertilizer that carries hydrated lime to sweeten the soil.

ONE TON OF 'AERO' CYANAMID SUPPLIES 1400 POUNDS OF HYDRATED LIME IN ADDITION TO 440 POUNDS OF NITROGEN

For further information, write

AMERICAN CYANAMID COMPANY

Manufacturers of 'Aero' Cyanamid and 'Ammo-Phos'

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Cyanamid is NITROGEN plus LIME

variety, twenty years old, receiving clean cultivation on a slope of from 1% to 5% showed that in 18.8% of this orchard all the surface soil had been removed, 26.6% of the surface soil showed a depth of 1 to 2 inches, 6.2% a surface depth of 2 to 5 inches, and 28.2% a thickness of 5 to 6 inches. The normal surface soil of 6 inches or more was found in only 20.8% of the orchard indicating that approximately 80% has suffered erosion to some degree, and in about 45% of it the surface soil had been practically removed. Proper terracing, permanent sod, strip cropping and dams across gullies are effective control measures."

CIDER TAX

In Ohio, the grower who sells bottled cider must pay a state tax of about eleven cents a gallon if the bottle is sealed with any kind of metal stopper or a stopper that must be removed by mechanical means. A cork stopper used merely to keep contents of the bottle from spilling does not require the seller to pay a tax.

PRODUCTION CREDIT

Dr. E. N. Cory has requested the publication of the following statement:

"The East Central Production Credit Association is now a going concern. Preliminary steps for the organization of this association for five states, Pennsylvania, West Virginia, Maryland, Delaware and Virginia, were taken at a meeting at Martinsburg on December 26. Directors for each state and an advisory committee were selected. The charter application was signed by the men representing each state and other preliminaries were completed at this time. The following directors were selected: For Pennsylvania, F. G. McCann; West Virginia, E. Lee Goldsborough; Virginia, Phil Gold; Maryland, J. Walter Englar; and Delaware, Frank Richardson.

"This Board of Directors met during the first week of January and perfected the organization, completed the loan application blank, and are now ready to receive applications for loans.

"Loan application blanks may be obtained from your County Agricultural Agent or directly from the offices of the Association at 2218 N. Charles Street, Baltimore. You are advised, if you need money for the production of your 1934 crop, to get in touch promptly with your County Agent or the home office, secure an application blank, fill it out and file promptly. In addition to the two sources mentioned, an advisor for each county will be appointed in each state and he will be in a position to furnish you with application blanks and assist you in making your loan applications.

"The formation of this credit association will undoubtedly be the turning point in the fruit industry. Loans to the extent of your needs for financing your 1934 crop will be available promptly. There is a certain amount of routine necessary, but you can facilitate the matter by promptness in making the application. See your County Agent in regard to this at once."

HAVE YOU READ THE ADVERTISEMENTS?

PRUNING FOR BETTER FRUIT

The present season's apple market has shown that the better grade of larger-sized apples is paying the premium. It has been stated that no grower is getting rich selling utility grade apples. In other words, the fruit grower should give more attention to production of clean, good-sized fruit, even at the expense of a shorter crop. The sales records of many growers will bear this out.

The serious outbreak of scab, and the heavy damage from codling moth and rosy aphis in many sections of Maryland the past season, have shown that even the best spraying does not give perfect control. Spraying must be both timely and thorough. It is not a cure-all, but a preventative measure, consequently every part of the leaves and fruits should receive a film of spray.

During the past few years, growers have had to curtail orchard expenditures, and pruning has, in many cases, been neglected or partly done. This year it is very essential that trees be pruned so as to open up all parts for better spraying. Crossing, crowded, broken, or diseased limbs and branches should be removed. Lower limbs that drag the ground and are known to produce poorly colored, small, blemished fruit should be removed. There should be little necessity for removal of very large limbs, but if it is necessary, take them out. After the larger wood has been removed, the remaining limbs and branches should be thinned off, that is, some smaller twigs and "fruit hangers" should be cut out, here and there, to allow better growth and exposure to sunlight for the twigs and branches remaining. If the trees are becoming too tall, they may be brought down some by cutting to an outward growing branch, and care must be used not to cut the tops back too heavily, leaving weak branches that will split down when bearing a crop.

The main things to remember are that trees should not be butchered, nor "skinned" of all smaller branches, leaving "feather dusters" out at the ends of the branches. Keep in mind a tree balanced so as to carry a good crop, well exposed to light, and to good spraying. Usually, smaller cuts made throughout the tree will accomplish the desired purpose and such cutting also is known to give added stimulation to the bearing wood remaining on the tree.

In peach pruning, the same principle of thinning holds true. After the larger necessary cuts have been made, the bearing wood for next year's crop should be thinned out to allow plenty of room for growth of leaves and fruit.

AND AGAIN—CODLING MOTH

Dr. W. S. Hough of the Winchester Field Laboratory discussed codling moth so ably at the winter meeting of the Maryland Society, that further discussion may seem unnecessary. Last season, we found that codling moth was far from being "licked." Dr. Hough told us that the worm of codling moth was not to be frightened for it has no brains, so doesn't have sense enough to be afraid; it can see but very little, and can't hear, so there's no chance of it running to hide when a sprayer clatters down the orchard row. Only good spraying, the use of treated bands on scraped trees where infestation is heavy; and good sanitation about the packing house, seem to be effective, and even

these measures are not always immediately successful.

The packing house is always a source of moth carry-over. It is strongly recommended that field crates or baskets be stored in a tight room or cellar, to prevent the spring-emerging moths that have wintered over on the crates or baskets from laying eggs.

In 1928 some experimental work was done in California to determine if electric lights in the orchard would not defer egg laying of the codling moth, but with three types of lighting and no spraying the wormy apples were as high as 93 per cent, while on the sprayed block where no lights were used the percentage of wormy apples ran from 3 to 17 per cent, varying with the 5 varieties of apple trees in the plot. The California observations showed that moths flew for about 2 hours, if weather was favorable. Egg laying took place mainly between 20 minutes before and 20 minutes after the sunset period with temperatures 60° to 69° F., and with almost no movement of air.

So it seems that good spraying is still the main hope for codling moth control.

Teacher: "If I subtract 29 from 1247, what's the difference?"
Willie: "Yeah. That's what I say. Who cares?"

Man is wonderful. He has learned to fly like a bird.
Yes, but let's see him sit contentedly on a barb-wire fence.

IS YOUR NEIGHBOR A MEMBER OF THIS SOCIETY?

More members make a better and stronger Horticultural Society. Membership dues are payable in January. Have you paid yours?

Every Product Advertised in

"The Maryland Fruit Grower"

is now used in MARYLAND ORCHARDS

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SUNOCO SPRAY **Emulsifies readily Controls Scale and Red Mite, Is Safe and Effective**

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MAKERS OF BLUE SUNOCO MOTOR FUEL

For Thirty Years

The One Dependable Oil Spray

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SCALECIDE

THE COMPLETE DORMANT SPRAY

Scalecide has a wider range of usefulness than any other spray ever made.

As a delayed dormant spray Scalecide does all that can be done at that particular time with any spray combination of sprays. Kills scale, aphis, red mite, etc., and invigorates the trees.

As a tree paint kills as high as 84% of the over-wintering codling moth without injury to the trees.

For root troubles prevents and tends to heal collar rot. Kills wooly aphis on the roots.

For peach borers kills as high a percentage as you can get from worming without the danger from Paradichlorbenzine to young or old trees.

SUMMER SCALECIDE combined 1-100 with Sulfocide 1-200 is the ideal pink and prepink spray for apples. Kills aphis, red mite, red bug and any soft bodied insect it hits. Also is first protection for scab at less than cost the of nicotine alone.

Summer Scalecide acts as a spreader and activator for nicotine. For codling moths and other summer applications. New York Experimental Station found it consistently one of the best of a long list of activators and certainly the cheapest. Unexcelled as a spreader with bordeaux or arsenate. One of the most economical summer oils.

PRATT'S OIL EMULSIONS

Priced so low that it will hardly pay to make at home.

Pratt's "83"—a highly refined 83% lubricating oil emulsion, having special properties for high scale control and safety. The equal of any oil emulsion sold in competition with Scalecide.

Tar-o-wash—a tar oil emulsion for aphis eggs in winter. Contains lubricating oil for scale and red mite control—50% tar, 33% lubricating oil.

Straitar—a straight tar oil emulsion for aphis eggs—85% tar. Used alone or combined with oil emulsion for a complete winter wash.

Write Department "F" for complete details and prices on the products which interest you the most.

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